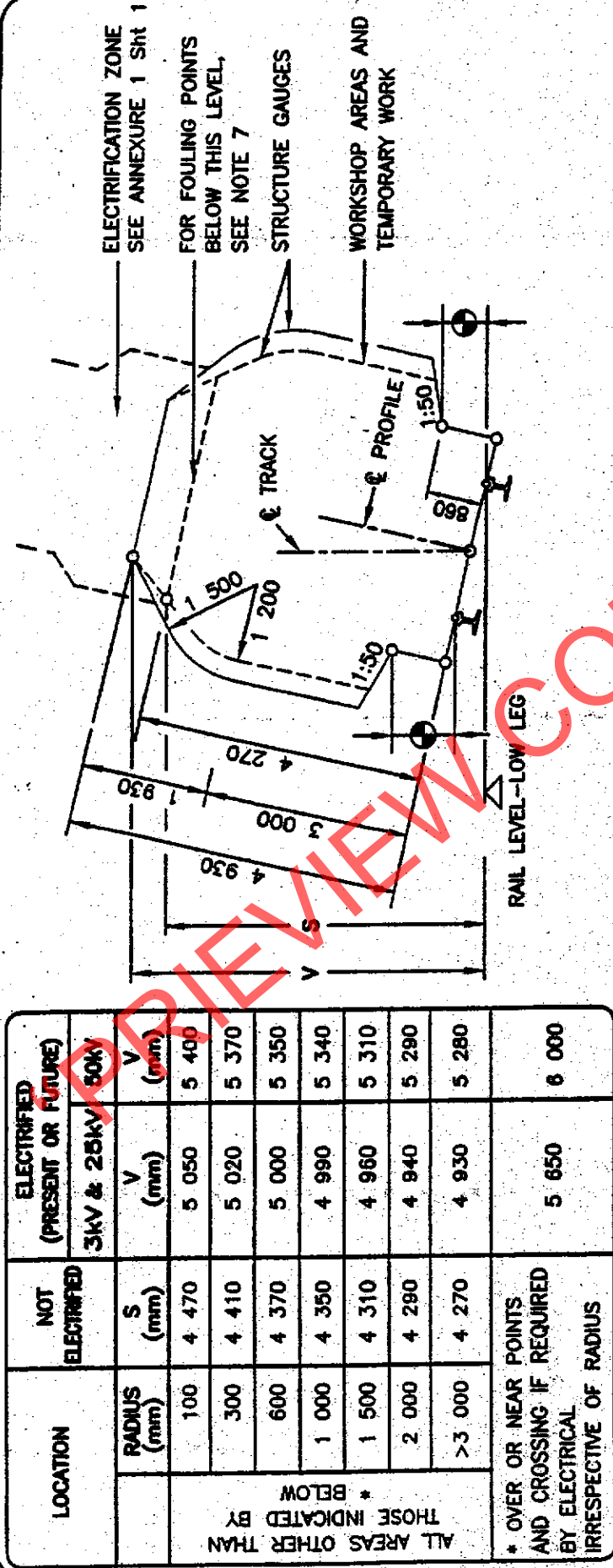


RADIUS (m)	WITH CANT		NO CANT	
	H (mm)	L (mm)	H & L	C (mm)
90	2 730	3 090	2 780	2 100
100	2 700	3 030	2 750	2 050
120	2 650	2 970	2 700	2 010
140	2 620	2 920	2 660	1 980
170	2 590	2 870	2 630	1 970
200	2 570	2 820	2 600	1 950
250	2 550	2 790	2 580	1 920
300	2 540	2 760	2 560	1 900
350	2 530	2 730	2 540	1 890
400	2 520	2 710	2 530	1 875
500	2 510	2 680	2 520	1 850
600	2 500	2 660	2 510	1 830
800	2 490	2 620	2 500	1 790
1 000	2 480	2 600	2 490	1 760
1 200	2 480	2 580	2 490	1 730
1 500	2 480	2 550	2 480	1 700
2 000	2 480	2 500	2 480	1 660
3 000	2 470	2 470	2 470	1 600
>5 000	2 460	2 460	2 460	1 600

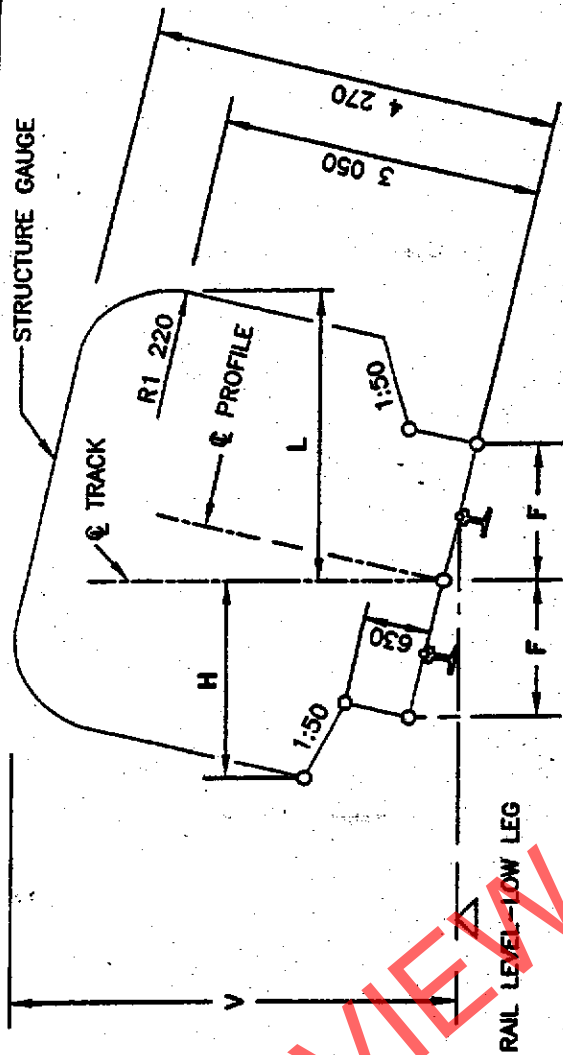
REMARKS:

- H AND B IS THE REQUIRED HORIZONTAL CLEARANCE ON THE OUTSIDE OF THE CURVE BASED ON MINIMUM CANT.
- L AND C IS THE REQUIRED HORIZONTAL CLEARANCE ON THE INSIDE OF THE CURVE BASED ON MAXIMUM CANT.
- INTERMEDIATE VALUES MAY BE INTERPOLATED BY THE ENGINEER IN CHARGE.
- FOR WORKSHOP AREAS AND TEMPORARY WORK, CLEARANCES H AND L MAY BE REDUCED BY 300mm.
- SEE ANNEXURE 1 SHEET 3 FOR PLATFORM CLEARANCES.
- ALSO REFER TO REMARKS 4 TO 8 OF ANNEXURE 1 SHEET 2.



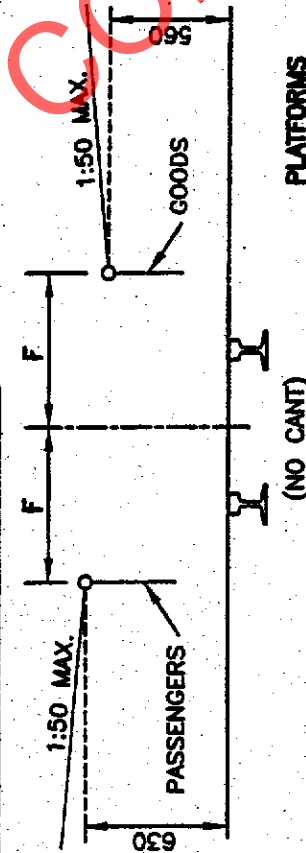
REMARKS:

1. V IS THE REQUIRED VERTICAL CLEARANCE EXCEPT WHERE REDUCED CLEARANCE S APPLIES.
2. S IS THE MINIMUM VERTICAL CLEARANCE FOR STRUCTURES AND TEMPORARY WORK OVER NON-ELECTRIFIED LINES.
3. INTERMEDIATE VALUES MAY BE INTERPOLATED BY THE ENGINEER IN CHARGE.
4. FOR APPLICATION AT CURVES
  - 4.1 APPLY INCREASED CLEARANCES FOR CURVES TO POINTS 3m BEYOND THE ENDS OF THE CIRCULAR CURVE.
  - 4.2 REDUCE CLEARANCES AT A UNIFORM RATE OVER THE REMAINDER OF THE TRANSITION CURVE.
  - 4.3 FOR NON-TRANSITIONED CURVES REDUCE AT A UNIFORM RATE OVER A LENGTH OF 15m ALONG STRAIGHTS.
5. NEW STRUCTURES: SEE BRIDGE CODE.
6. TUNNELS: SEE DRAWING BE 82-35.
7. FOULING POINTS: SEE CLAUSE B.1.
8. CLEARANCES ARE BASED ON 15m BOGIE CENTRES AND 21.2m VEHICLE BODY LENGTH.
9. SEE ANNEXURE 1 SHEET 3 FOR PLATFORM CLEARANCES.



RADIUS (m)	F (mm)
50	1 550
60	1 510
80	1 480
100	1 430
120	1 410
140	1 390
170	1 380
200	1 370
250	1 360
300	1 350
600	1 330
1 000	1 320
>2 000	1 320
STRAIGHT	1 310

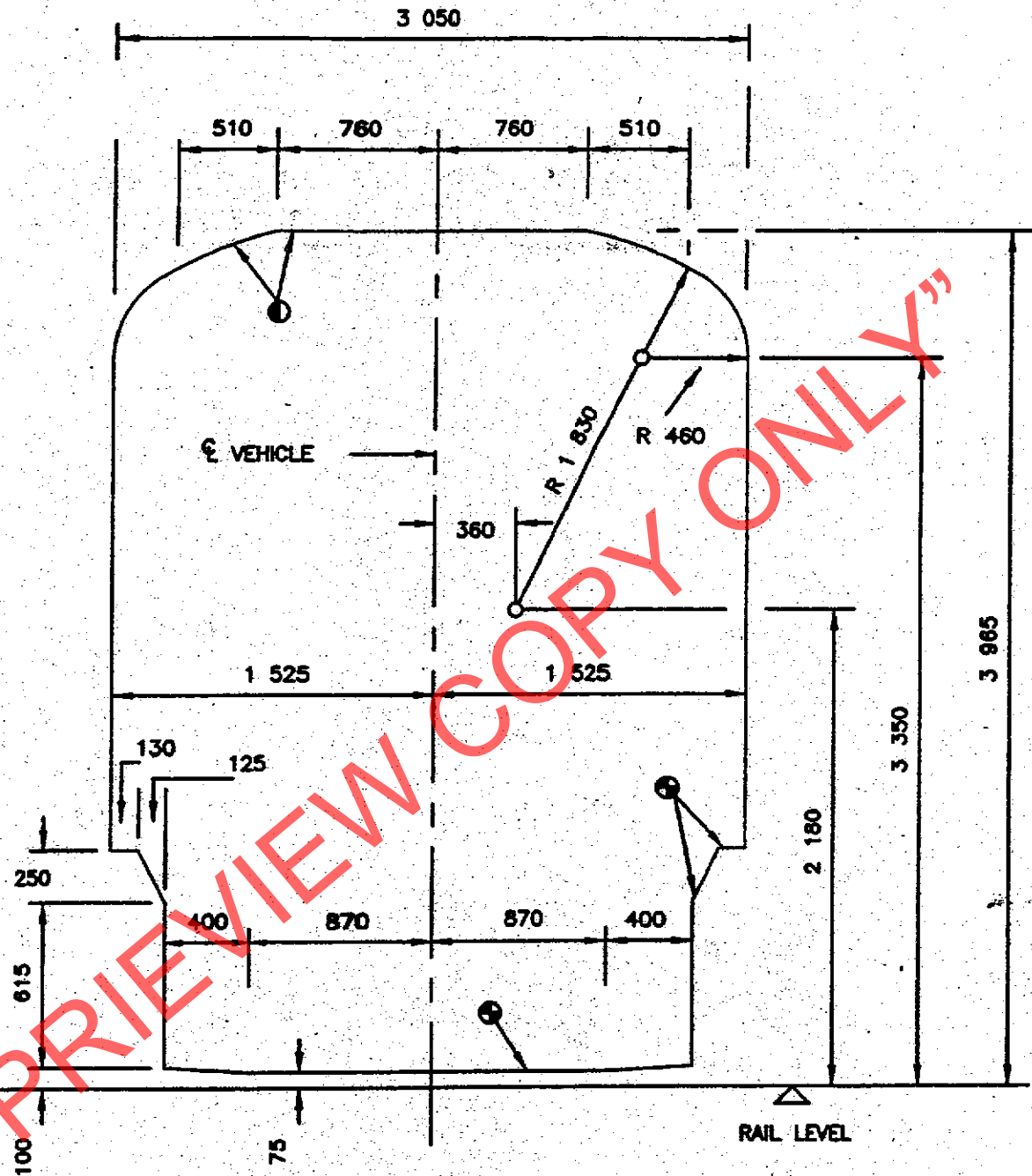
CLEARANCES



RADIUS (m)	WITH CANT		NO CANT	V (mm)
	H (mm)	L (mm)	H & L (mm)	
50	2 370	2 490	2 400	4 320
70	2 310	2 420	2 330	4 310
100	2 260	2 370	2 280	4 310
140	2 220	2 340	2 250	4 310
200	2 200	2 300	2 220	4 300
300	2 190	2 270	2 200	4 300
500	2 180	2 230	2 190	4 290
700	2 170	2 200	2 180	4 270
1 000	2 170	2 170	2 170	4 270
>2 000	2 160	2 160	2 160	4 270

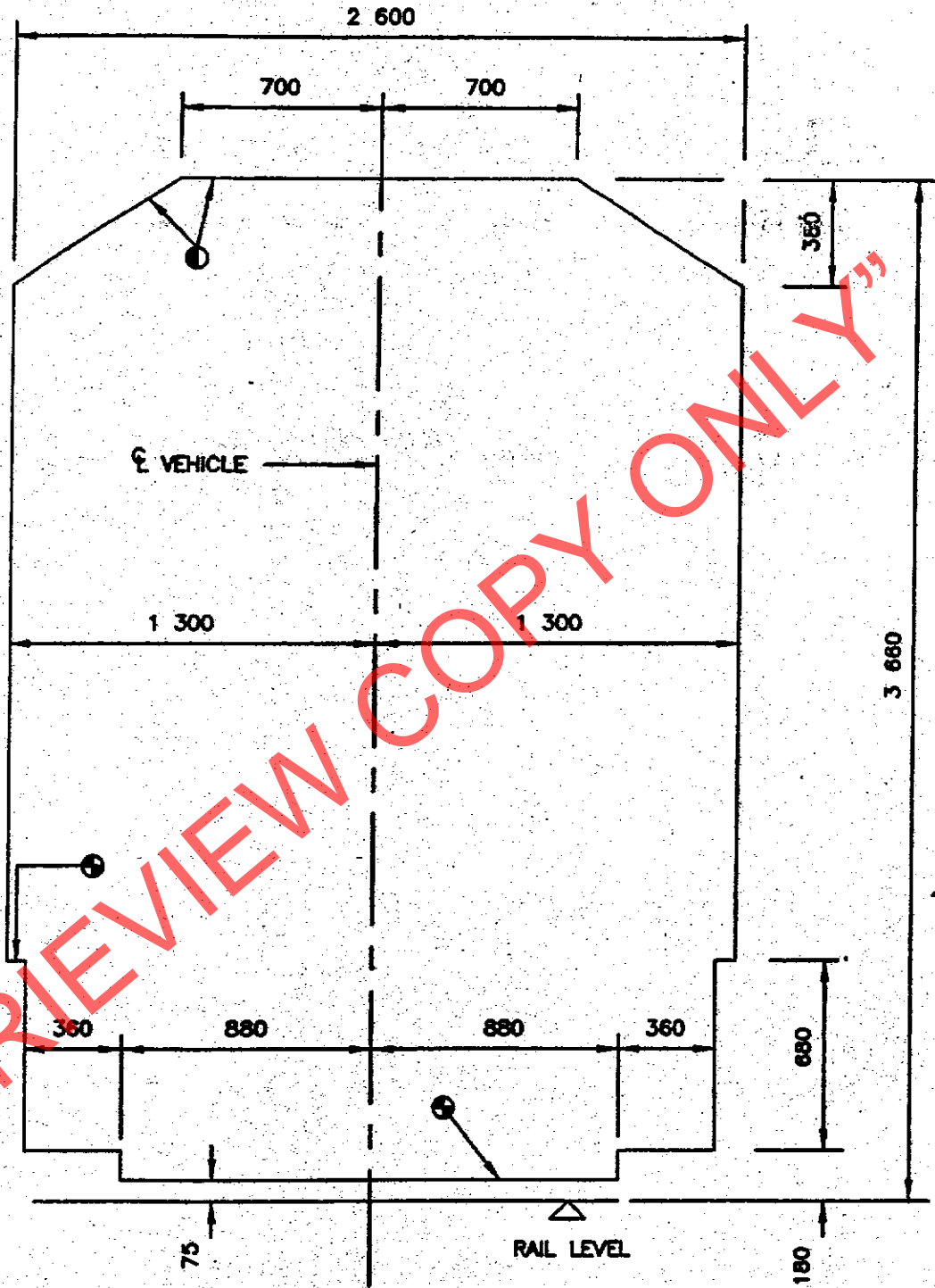
REMARKS:

- H IS THE MINIMUM HORIZONTAL CLEARANCE ON THE OUTSIDE OF THE CURVE BASED ON MINIMUM CANT.
- L IS THE MINIMUM HORIZONTAL CLEARANCE ON THE INSIDE OF THE CURVE BASED ON MAXIMUM CANT.
- V IS THE MINIMUM VERTICAL CLEARANCE.
- FOR APPLICATION AT CURVES:
  - 1 APPLY INCREASED CLEARANCES FOR CURVES TO POINTS 2m BEYOND THE ENDS OF THE CIRCULAR CURVE.
  - 2 REDUCE CLEARANCES AT A UNIFORM RATE OVER THE REMAINDER OF THE TRANSITION CURVE.
  - 3 FOR NON-TRANSITIONED CURVES REDUCE AT A UNIFORM RATE OVER A LENGTH OF 18m ALONG STRAIGHTS.
- INTERMEDIATE VALUES MAY BE INTERPOLATED BY THE ENGINEER IN CHARGE.
- ALSO REFER TO REMARKS 5, 6 AND 7 OF ANNEXURE 1 SHEET 2.
- CLEARANCES ARE BASED ON 9 700mm BOGIE CENTRES AND 13 700mm VEHICLE BODY LENGTH.
- SEE ANNEXURE 1 SHEET 3 FOR STRUCTURES ON PLATFORMS.



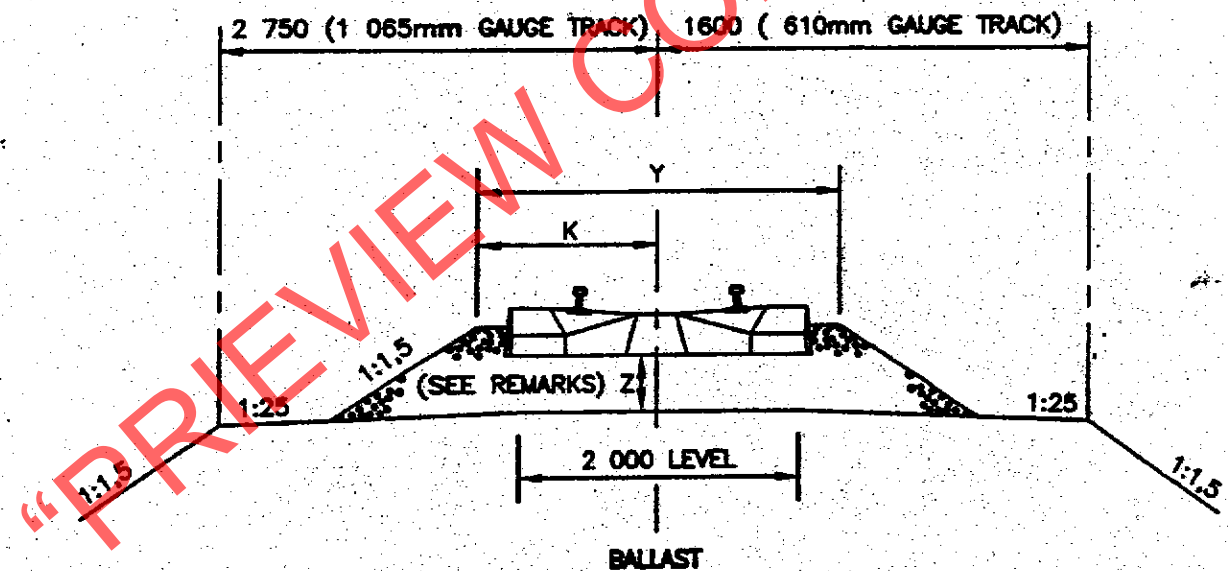
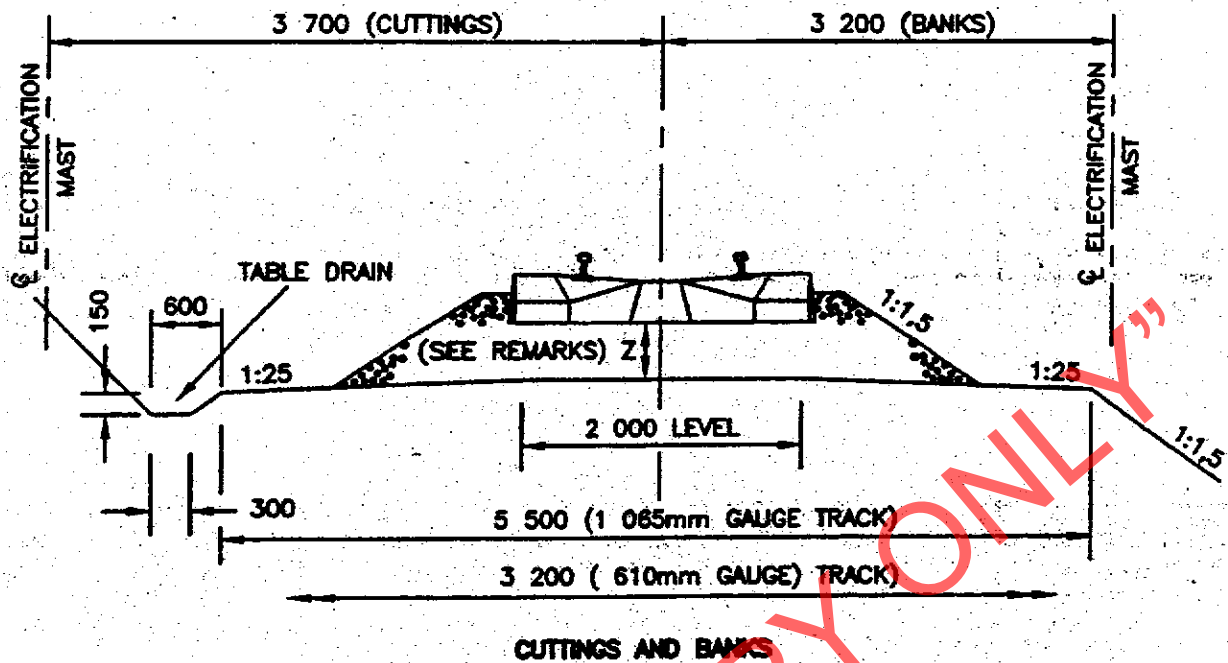
REMARKS:

1. ⓪ WITHOUT LOAD AND WITH NEW TYRES, VEHICLE MUST NOT BE HIGHER THAN THIS OUTLINE.
2. Ⓛ WITH FULL LOAD AND WORN TYRES, VEHICLE MUST NOT BE LOWER THAN THIS OUTLINE.



**REMARKS:**

1. ⊕ WITHOUT LOAD AND WITH NEW TYRES, VEHICLE MUST NOT BE HIGHER THAN THIS OUTLINE.
2. ⊙ WITH FULL LOAD AND WORN TYRES, VEHICLE MUST NOT BE LOWER THAN THIS OUTLINE.



CLASS OF LINE	Z (mm)	Y (mm)	K (mm)	QUANTITY (m <sup>3</sup> /km)		
				PY/FY	P2/F4	WOOD
S	300	2 800	1 400	1 600	-	-
N1	280	2 700	1 350	1 500	1 400	-
N2	200	2 700	1 350	-	1 200	1 100

REMARKS:

1. Z TO BE MEASURED UNDER THE LOW LEG RAIL ON CURVES.
2. DEPTH OF BALLAST (Z) ARE TO BE MEASURED IN THE CONSOLIDATED STATE, THAT IS AFTER 100 000 GROSS TON TRAIN TRAFFIC.

DESTRESSING AND WORKING  
TEMPERATURE RANGES

SECTION	DESTRESSING RANGES		WORKING RANGES FOR RAIL LAYING	
	THROUGH LINES	YARD TRACKS	B	C
	A	D		
CAPE TOWN - BELLVILLE	20 - 50	25 - 45	15 - 55	15 - 60
* BELLVILLE - WORCESTER	25 - 45	30 - 40	20 - 50	20 - 60
* WORCESTER - DE AAR	25 - 40	25 - 35	20 - 50	20 - 55
HUTCHINSON - CALVINIA	25 - 35	25 - 30	20 - 40	20 - 50
KOOTJIESKOLK - SAKRIMER	25 - 35	25 - 30	20 - 40	20 - 50
KRAAIFONTEIN - BITTERFONTEIN	25 - 45	30 - 40	20 - 50	20 - 60
KALBASKRAAL - SALDANHA	25 - 45	30 - 40	20 - 50	20 - 60
HERMON - PORTERVILLE	25 - 45	30 - 40	20 - 50	20 - 60
WOLSELEY - PRINCE ALFRED HAMLET	25 - 45	30 - 40	20 - 50	20 - 60
PAARL - FRANCHHOEK	25 - 45	30 - 40	20 - 50	20 - 60
EERSTERVIER - BREDASDORP	25 - 45	30 - 40	20 - 50	20 - 60
VAN DER STEL - STRAND	25 - 45	30 - 40	20 - 50	20 - 60
KLIPDALE - PROTEN	25 - 45	30 - 40	20 - 50	20 - 60
EERSTERVIER - MULDERSVLEI	25 - 45	30 - 40	20 - 50	20 - 60
* WORCESTER - RIVERSDALE	25 - 40	30 - 35	20 - 45	20 - 55
KENTEMADE - ATLANTIS	25 - 45	30 - 40	20 - 50	20 - 60
TABLE BAY HARBOUR - SIMONSTOWN	20 - 50	25 - 45	15 - 55	15 - 60
CAPE TOWN CENTRAL METRO AREA	20 - 50	25 - 45	15 - 55	15 - 60
* DE AAR - * KIMBERLEY	25 - 35	25 - 30	20 - 40	20 - 50
* KIMBERLEY - MAKWASSIE	25 - 40	30 - 40	20 - 50	20 - 55
* MAKWASSIE - * KLERKSDORP	20 - 40	25 - 35	15 - 50	15 - 55
* KIMBERLEY - * POSTMASBURG	25 - 35	25 - 30	20 - 40	20 - 50
POSTMASBURG - HOTAZEL	25 - 40	30 - 35	20 - 45	20 - 55
DE AAR - NAKOP	25 - 40	30 - 35	25 - 45	25 - 55
GROVEPUT - COPPERTON	25 - 40	30 - 35	25 - 45	20 - 55
UPINGTON - KAKEMAS	25 - 40	30 - 35	25 - 45	20 - 55
BELMONT - DOUGLAS	25 - 40	30 - 35	20 - 45	20 - 55
VEERTIENSTROME - MAFIKENG	25 - 40	30 - 35	20 - 45	20 - 55
PUDIMOE - COUGNE	25 - 40	30 - 35	20 - 45	20 - 55
* MAKWASSIE - VERMAAS	20 - 40	25 - 35	15 - 45	15 - 55
OTTOSDAL - * KLERKSDORP	20 - 40	25 - 35	15 - 45	15 - 55
LICHTENBURG - WELVERDIEND	20 - 40	25 - 35	15 - 45	15 - 55
PORT ELIZABETH - ALICEDALE	25 - 45	30 - 40	20 - 50	20 - 60
* ALICEDALE - NOUPOORT	25 - 40	30 - 35	20 - 45	20 - 55
NOUPOORT - DE AAR	25 - 40	30 - 35	20 - 45	20 - 55
SWARTKOPS - KLIPPLAAT	25 - 45	30 - 40	20 - 50	20 - 60
KLIPPLAAT - ROSMEAD	25 - 45	30 - 40	20 - 50	20 - 60
ADDO - KIRKWOOD	25 - 45	30 - 40	20 - 50	20 - 60
RIVERSDALE - * MOSSELBAAI	25 - 45	30 - 40	20 - 50	20 - 60
MOSSELBAAI - GEORGE	20 - 45	25 - 40	15 - 50	15 - 60
* GEORGE - OUDTSHOORN	25 - 45	30 - 40	20 - 50	20 - 60
* OUDTSHOORN - * KLIPPLAAT	25 - 40	30 - 35	20 - 45	20 - 55
OUDTSHOORN - CALITZDORP	25 - 45	30 - 40	20 - 50	20 - 60
* GEORGE - KNYSNA	25 - 45	30 - 40	20 - 50	20 - 60
* PORT ELIZABETH - AVONTUUR	25 - 40	30 - 35	20 - 45	20 - 55
GANTOOS - PATENSIE	25 - 45	30 - 40	20 - 50	20 - 60
COOKHOUSE - SOMERSET EAST	25 - 40	30 - 35	20 - 45	20 - 55
* ALICEDALE - PORT ALFRED	30 - 40	30 - 35	25 - 45	25 - 55
BARKLEY BRIDGE - ALEXANDRIA	25 - 45	30 - 40	20 - 50	20 - 60
EAST LONDON - DOHNE	20 - 45	25 - 40	15 - 50	15 - 60
* DOHNE - QUEENSTOWN	25 - 40	30 - 35	20 - 50	20 - 55
* QUEENSTOWN - BURGERSDORP	20 - 35	25 - 30	15 - 45	15 - 50
* BURGERSDORP - SPRINGFONTEIN	20 - 40	25 - 40	15 - 50	15 - 55
COOKHOUSE - BLANEY	25 - 40	30 - 35	20 - 45	20 - 55
AMABELE - UMTATA	25 - 40	30 - 35	20 - 45	20 - 55
IMVANI - QAMATA	25 - 40	30 - 35	20 - 45	20 - 55
* ROSMEAD - STORMBERG	20 - 30	20 - 25	15 - 35	15 - 45
SCHOOMBEE - HOFMEYR	20 - 30	20 - 25	15 - 35	15 - 45
STERKSTROOM - MACLAER	20 - 30	20 - 25	15 - 35	15 - 45
MOLTENO - JAMESTOWN	20 - 30	20 - 25	15 - 35	15 - 45
BURGERSDORP - BARKLEY EAST	20 - 35	25 - 30	15 - 40	15 - 50

REMARKS:

1. FOR REMARKS SEE ANNEXURE 16 SHEET 5.

DESTRESSING AND WORKING  
TEMPERATURE RANGES

SECTION	DESTRESSING RANGES		WORKING RANGES FOR RAIL LAYING	
	THROUGH LINES	YARD TRACKS	B	C
	A	D		
NOUPOORT - SPRINGFONTEIN	20 - 40	25 - 35	15 - 45	15 - 55
* SPRINGFONTEIN - BLOEMFONTEIN	20 - 35	25 - 30	15 - 40	15 - 50
BLOEMFONTEIN - THEUNISSEN	20 - 35	25 - 30	15 - 40	15 - 50
* THEUNISSEN - KROONSTAD	20 - 40	25 - 35	15 - 45	15 - 55
KROONSTAD - VEREENIGING	20 - 40	25 - 35	15 - 45	15 - 55
BETHLEHEM - ARLINGTON	15 - 35	20 - 30	10 - 40	10 - 50
* ARLINGTON - * KROONSTAD	15 - 40	20 - 35	10 - 45	10 - 55
KIMBERLEY - EMMAUS	25 - 40	25 - 35	20 - 45	20 - 55
* EMMAUS - BLOEMFONTEIN	20 - 35	25 - 30	15 - 40	15 - 50
SPRINGFONTEIN - KOFFIEFONTEIN	25 - 40	30 - 35	20 - 45	20 - 55
ALIWAL NORTH - SANNASPOS	20 - 40	25 - 35	15 - 45	15 - 55
GROOTVLEI - * BETHLEHEM	20 - 35	25 - 30	15 - 40	15 - 50
* BETHLEHEM - BLOEMFONTEIN	20 - 35	25 - 30	15 - 40	15 - 50
HARRISMITH - BETHLEHEM	15 - 35	20 - 30	10 - 40	10 - 50
VREDEFORT - DOVER	20 - 40	25 - 35	15 - 45	15 - 55
WOLWEHOEK - ARLINGTON	20 - 40	25 - 35	15 - 45	15 - 55
* ARLINGTON - MARGUARD	20 - 40	25 - 35	15 - 45	15 - 55
ORKNEY - WESLEIGH	20 - 40	25 - 35	15 - 45	15 - 55
VIERFONTEIN - BULTFONTEIN	20 - 40	25 - 35	15 - 45	15 - 55
ANCONA - WHITES	20 - 40	25 - 35	15 - 45	15 - 55
THEUNISSEN - WINBURG	20 - 40	25 - 35	15 - 45	15 - 55
WARDEN - * HARRISMITH	20 - 40	25 - 35	15 - 45	15 - 55
MASERU - MARSAILLES	20 - 40	25 - 35	15 - 45	15 - 55
LADYBRAND - MODDERPOORT	20 - 40	25 - 35	15 - 45	15 - 55
VIRGINIA - GLEN HARMONY	20 - 40	25 - 35	15 - 45	15 - 55
WONDERFONTEIN - BROODSNYERSPLAAS	15 - 40	20 - 35	10 - 45	10 - 55
ERMELO - MACHADODORP	20 - 40	25 - 35	15 - 45	15 - 55
BUHRMANNSKOP - LOTHAIR	15 - 35	20 - 30	10 - 40	10 - 50
ROSSBURG - * DASSENHOEK	20 - 45	25 - 40	15 - 50	15 - 60
DASSENHOEK - CATO RIDGE	25 - 40	30 - 35	20 - 45	20 - 55
CATO RIDGE - PIETERMARITZBURG	25 - 40	30 - 35	20 - 45	20 - 55
* PIETERMARITZBURG - * VOLKSRUST	20 - 40	25 - 35	15 - 45	15 - 55
ROSSBURG - HILLCREST	20 - 45	25 - 40	15 - 50	15 - 60
* HILLCREST - CATO RIDGE	25 - 40	30 - 35	20 - 45	20 - 55
DURBAN - PORT SHEPSTONE	20 - 50	25 - 45	15 - 60	15 - 65
KELSO - UMZINTO	20 - 50	25 - 45	15 - 60	15 - 65
DURBAN - HLUHLUWE	20 - 50	25 - 45	15 - 60	15 - 65
* HLUHLUWE - GOLELA	25 - 45	30 - 40	20 - 55	20 - 60
EMPANGENI - NKWALINI	25 - 50	30 - 45	20 - 55	20 - 60
DUFFSROAD - KYAMASHU	25 - 50	30 - 45	20 - 55	20 - 60
THORNVILLE - RICHMOND	25 - 40	30 - 35	20 - 45	20 - 55
THORNVILLE - PENTICH	25 - 40	30 - 35	20 - 45	20 - 55
* PIETERMARITZBURG - KOKSTAD	25 - 35	25 - 30	20 - 40	20 - 50
DONNYBROOK - UNDERBERG	20 - 35	25 - 30	15 - 40	15 - 50
FRANKLIN - MATATIELE	20 - 35	25 - 30	15 - 40	15 - 50
PIETERMARITZBURG - DALTON	25 - 40	30 - 35	20 - 45	20 - 55
* DALTON - KRANSKOP	20 - 40	25 - 35	15 - 45	15 - 55
SCHROEDERS - BRUYNHILL	25 - 40	30 - 35	20 - 45	20 - 55
* DALTON - GLENSIDE	20 - 40	25 - 35	15 - 45	15 - 55
GREYTOWN - MOUNT ALIDA	20 - 40	25 - 35	15 - 45	15 - 55
ENNERSDALE - BERGMILLE	25 - 40	30 - 35	20 - 45	20 - 55
GLENCOE - VRYHEID	20 - 40	20 - 35	15 - 50	15 - 55
NEWCASTLE - UTRECHT	20 - 40	25 - 35	15 - 45	15 - 55
LADYSMITH - HARRISMITH	20 - 40	25 - 35	15 - 45	15 - 55

REMARKS:

1. FOR REMARKS SEE ANNEXURE 16 SHEET 5.



DESTRESSING AND WORKING  
TEMPERATURE RANGES

SECTION	DESTRESSING RANGES		WORKING RANGES FOR RAIL LAYING	
	THROUGH LINES	YARD TRACKS	B	C
	A	D		
KLERKSDORP - * POTCHEFSTROOM	20 - 35	25 - 30	20 - 40	15 - 50
POTCHEFSTROOM - * KRUGERSDORP	20 - 40	25 - 35	15 - 45	15 - 55
KRUGERSDORP - JOHANNESBURG	15 - 40	20 - 35	10 - 45	10 - 55
JOHANNESBURG - OLIFANTSFONTEIN	15 - 40	20 - 35	10 - 45	10 - 55
POTCHEFSTROOM - VEREENIGING	20 - 40	25 - 35	15 - 45	15 - 55
VEREENIGING - GERMISTON	20 - 40	25 - 35	15 - 45	15 - 55
VOLKSRUST - * STANDERTON	15 - 35	20 - 30	10 - 40	10 - 50
STANDERTON - * HEIDELBERG	20 - 35	25 - 30	15 - 40	15 - 50
HEIDELBERG - GERMISTON	20 - 40	25 - 35	15 - 45	15 - 55
BALFOUR NORTH - * GROOTVLEI	20 - 35	25 - 30	15 - 40	15 - 50
GROOTVLEI - REDAN	20 - 40	25 - 35	15 - 45	15 - 55
FIRHAM - VREDE	20 - 35	25 - 30	15 - 40	15 - 50
VOLKSRUST - BREYTEN	15 - 40	20 - 35	10 - 45	10 - 55
BETHAL - SPRINGS	20 - 40	25 - 35	15 - 45	15 - 55
SPRINGS - KAYDALE	20 - 40	25 - 35	15 - 45	15 - 55
MIDWAY - HOUTHUWEL	20 - 35	25 - 30	15 - 40	15 - 50
BANK - LANGLAAGTE	20 - 35	25 - 30	15 - 40	15 - 50
MAFIKENG - * KRUGERSDORP	25 - 40	30 - 35	20 - 45	20 - 55
APEX - WITBANK	20 - 35	25 - 30	15 - 40	15 - 50
DELMAS - HAWEKLIP	20 - 35	25 - 30	15 - 40	15 - 50
SENTRARAND AREA	15 - 35	20 - 30	10 - 40	10 - 50
JOHANNESBURG CENTRAL METRO AREA	15 - 40	20 - 35	10 - 45	10 - 55
OLIFANTSFONTEIN - * IRENE	15 - 40	20 - 35	10 - 45	10 - 55
IRENE - PRETORIA	20 - 40	25 - 35	15 - 45	15 - 55
PRETORIA - * WARBATHS	20 - 40	25 - 35	15 - 45	15 - 55
WARBATHS - * POTGIETERSRUS	20 - 45	25 - 40	15 - 55	15 - 60
POTGIETERSRUS - BEITBRIDGE	20 - 45	25 - 40	15 - 50	15 - 50
* PRETORIA - * WATERVAL BOVEN	20 - 40	25 - 35	15 - 50	15 - 55
WATERVAL BOVEN - * NELSPRUIT	20 - 45	25 - 40	15 - 55	15 - 60
NELSPRUIT - KOMATIPOORT	25 - 45	30 - 40	20 - 55	20 - 60
HERCULES - MAGALIESBURG	20 - 40	25 - 35	15 - 45	15 - 55
PRETORIA - BRITS	20 - 40	20 - 35	15 - 45	15 - 55
BRITS - RUSTENBURG	20 - 40	25 - 35	15 - 45	15 - 55
RUSTENBURG - * THABAZIMBI	20 - 40	25 - 35	15 - 45	15 - 55
THABAZIMBI - ELLISRAS	25 - 40	30 - 35	20 - 45	20 - 55
BRITS - ATLANTA	20 - 40	25 - 35	15 - 45	15 - 55
NYLSTROOM - VAALWATER	20 - 40	25 - 35	15 - 45	15 - 55
NABOOMSPRUIT - ZEBEDIELA	20 - 40	25 - 35	15 - 45	15 - 55
PIENAARSRIVER - MARIE HALL	25 - 40	30 - 35	20 - 45	20 - 55
RAYTON - CULLMAN	20 - 40	25 - 35	15 - 45	15 - 55
GROENBULT - KAAPMUIDEN	25 - 45	30 - 40	20 - 50	20 - 60
HOEDSPRUIT - PHALABORWA	25 - 45	30 - 40	20 - 50	20 - 60
* KAAPMUIDEN - BARBERTON	20 - 45	25 - 40	15 - 50	15 - 60
* NELSPRUIT - GRASKOP	20 - 35	25 - 30	15 - 40	15 - 50
CITRUS - PLASTON	20 - 45	25 - 40	15 - 50	15 - 60
BELFAST - STEELPOORT	20 - 40	25 - 35	15 - 45	15 - 55
DERWENT - ROOSSENEKAL	20 - 40	25 - 35	15 - 45	15 - 55
PRETORIA CENTRAL METRO AREA	20 - 40	25 - 35	15 - 45	15 - 55
SALDANHA - BAMBOESBAAI	20 - 50	25 - 45	15 - 55	15 - 60
* BAMBOESBAAI - SISHEN	25 - 40	30 - 35	20 - 45	20 - 55
RICHARDSBAY - ULUNDI	20 - 45	-	20 - 55	-
* ULUNDI - PIET RETIEF	20 - 40	25 - 35	20 - 50	15 - 55
PIET RETIEF - * SHEEPMORE	20 - 40	25 - 35	20 - 50	15 - 55
SHEEPMORE - ERMELO	15 - 35	20 - 30	15 - 45	10 - 50
* ERMELO - BROODSNYERSPLAAS	15 - 40	20 - 35	15 - 50	10 - 55
BROODSNYERSPLAAS - OGIES	15 - 40	20 - 35	15 - 50	10 - 55

REMARKS:

1. RAIL TEMPERATURES IN DEGREE CELSIUS.
2. USE A RAIL TENSOR WHEN THE DIFFERENCE IN THE 'A' RANGE IS 10° CELSIUS OR SMALLER.
3. \* DENOTES "EXCLUDED".